

Warm Up:

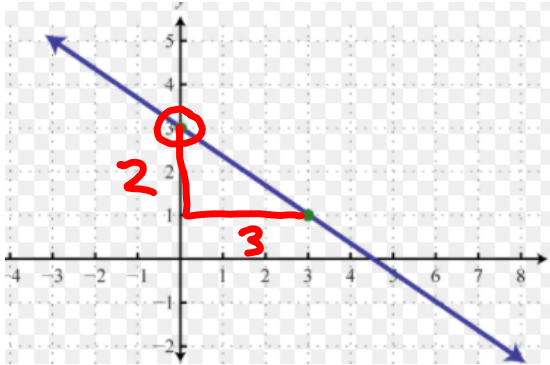
1. Find the slope of a line that passes through the points (6, 10) (8, 6)

$$\frac{6-10}{8-6} = \frac{-4}{2} = -2$$

2. Write an equation for the line to the right

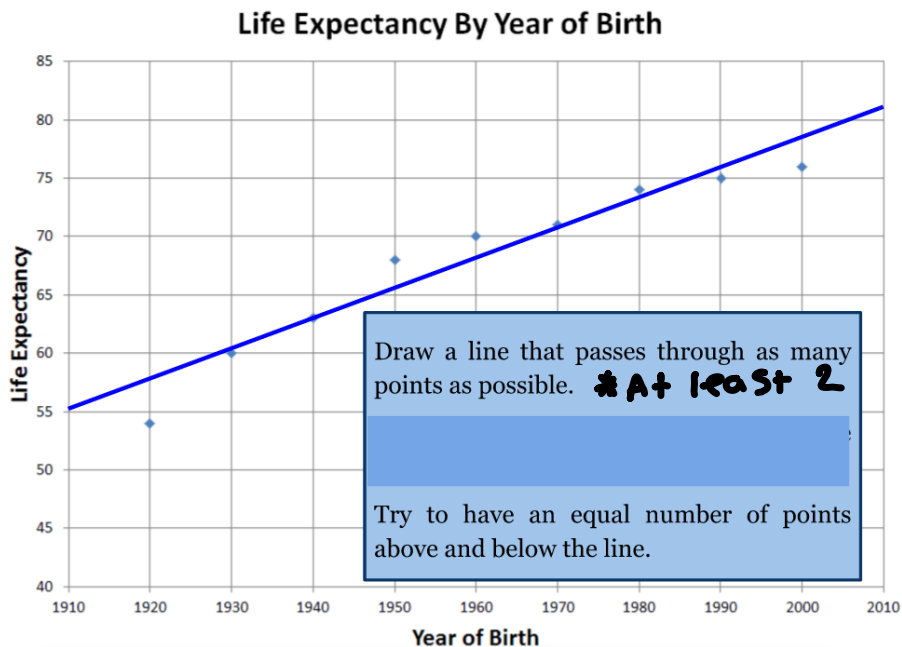
$$y = mx + b$$

$$y = -\frac{2}{3}x + 3$$



Line of Best Fit

Line of best fit

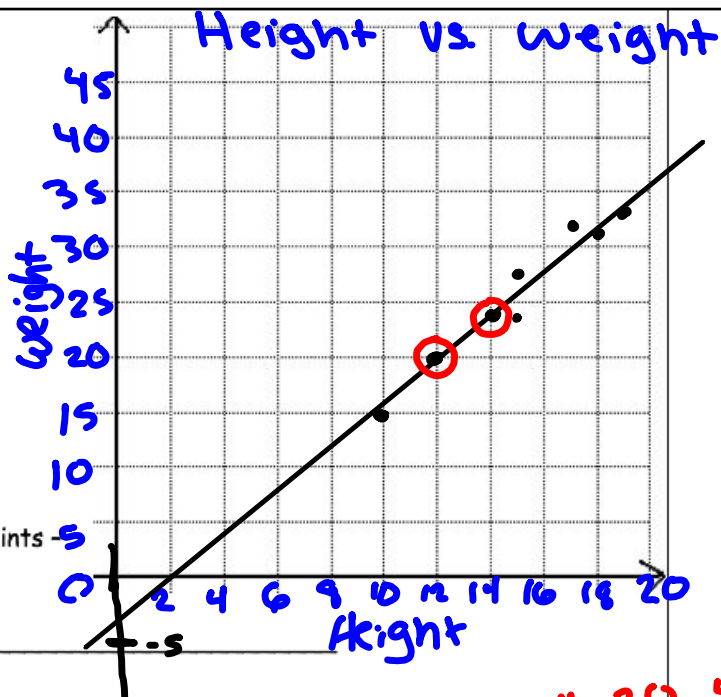


1 The following table has height in inches and weight

Height	Weight
10	15
* 12	20
* 14	24
15	24
15	28
17	32
18	31
19	33

Label the x axis for height and
Y axis (go by 5's) for weight. Plot points
Draw line of best fit

Equation - $y = 2x - 3$



$$y = mx + b$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{24 - 20}{14 - 12} = \frac{4}{2} = 2$$

Using the Equations to make predictions:

- Estimate with how much someone would weigh if their height is 25.

$$y = 2x - 3$$

↳ x

$$y = 2(25) - 3$$

$$50 - 3$$

$$y = 47$$

- Estimate how tall someone would be if their weight is 37.

$$y = 2x - 3$$

$$37 = 2x - 3$$

$$+ 3$$

$$+ 3$$

$$40 = 2x$$

$$\frac{40}{2}$$

$$x = 20$$

2 Tree Age and Height (in feet)

x	y
1	2
1	3
2	4
3	6
3	8
4	6
5	8
6	10

Label the x axis for age and y axis for height. Plot points. Draw line of best fit.

Equation

